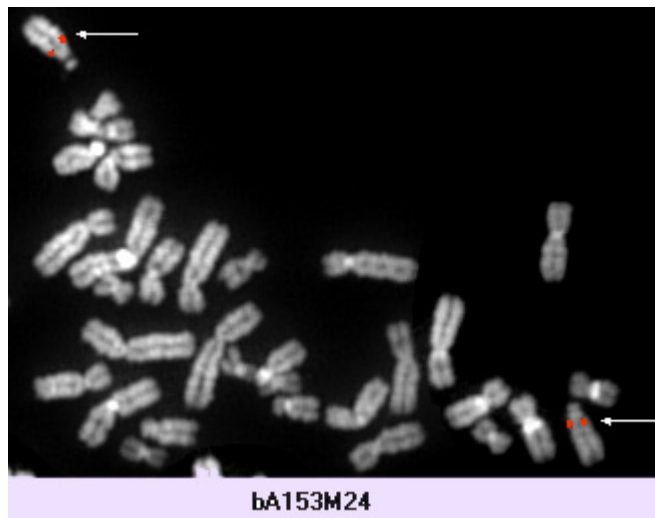


## CDX2 (caudal-related homeobox 2)

### Identity

Other names **CDX3**  
Hugo **CDX2**  
Location 13q12.3  
IPF1-CDX2- **FLT3** -FLT1



**CDX2** (13q12) - Courtesy Mariano Rocchi, [Resources for Molecular Cytogenetics](#).  
Laboratories willing to validate the probes are welcome : contact [rocchi@biologia.uniba.it](mailto:rocchi@biologia.uniba.it)

### DNA/RNA

Description Three exons transcribed from telomere to centromere.

### Protein

Description 311 amino acid protein of MW 33kDa. Class I homeobox gene related to *Drosophila* caudal.

Expression Nuclear protein normally expressed almost exclusively in the intestine, where it plays a role in the proliferation and differentiation of intestinal epithelial cells.

### Mutations

Somatic Found to be mutated in rare cases of [colorectal carcinoma](#)

## Implicated in

<b>Entity</b>	<a href="#">t(12;13)(p13;q12)</a> acute non lymphocytic leukaemia --> <a href="#">ETV6/ CDX2</a>
Abnormal Protein	Fusion of ETV6 exon 2 to CDX2 exon 2. The predicted protein contains the N-terminal region of ETV6 38 fused to the entire homeobox of CDX2. The single case described that harbours this fusion also expressed normal CDX2, which is not normally expressed in haemopoietic cells.

## External links

Nomenclature	
<a href="#">Hugo</a>	<a href="#">CDX2</a>
<a href="#">GDB</a>	<a href="#">CDX2</a>
<a href="#">Entrez_Gene</a>	<a href="#">CDX2_1045</a> caudal type homeobox transcription factor 2
Cards	
<a href="#">Atlas</a>	<a href="#">CDX2ID326</a>
<a href="#">GeneCards</a>	<a href="#">CDX2</a>
<a href="#">Ensembl</a>	<a href="#">CDX2</a>
<a href="#">Genatlas</a>	<a href="#">CDX2</a>
<a href="#">GeneLynx</a>	<a href="#">CDX2</a>
<a href="#">eGenome</a>	<a href="#">CDX2</a>
<a href="#">euGene</a>	<a href="#">1045</a>
Genomic and cartography	
<a href="#">GoldenPath</a>	<a href="#">CDX2 - 13q12.3</a> <a href="#">chr13:27434279-27441317 - 13q12.2</a> (hg18-Mar_2006)
<a href="#">Ensembl</a>	<a href="#">CDX2 - 13q12.2 [CytoView]</a>
<a href="#">NCBI</a>	<a href="#">Genes Cyto</a> <a href="#">Gene Seq</a> [Map View - NCBI]
<a href="#">OMIM</a>	<a href="#">Disease map [OMIM]</a>
<a href="#">HomoloGene</a>	<a href="#">CDX2</a>
Gene and transcription	
<a href="#">Genbank</a>	<a href="#">BC014461</a> [ENTREZ]
<a href="#">Genbank</a>	<a href="#">U51096</a> [ENTREZ]
<a href="#">Genbank</a>	<a href="#">Y13709</a> [ENTREZ]
<a href="#">RefSeq</a>	<a href="#">NM_001265</a> [SRS] <a href="#">NM_001265</a> [ENTREZ]
<a href="#">AceView</a>	<a href="#">CDX2</a> AceView - NCBI
<a href="#">TRASER</a>	<a href="#">CDX2</a> Traser - Stanford
<a href="#">Unigene</a>	<a href="#">Hs.174249</a> [SRS] <a href="#">Hs.174249</a> [NCBI] <a href="#">HS174249</a> [spliceNest]

## Protein : pattern, domain, 3D structure

<a href="#">SwissProt</a>	<a href="#">Q5VTU7</a> [SRS] <a href="#">Q5VTU7</a> [EXPASY] <a href="#">Q5VTU7</a> [INTERPRO]
<a href="#">Prosite</a>	<a href="#">PS00027 HOMEBOX_1</a> [SRS] <a href="#">PS00027 HOMEBOX_1</a> [Expasy]
<a href="#">Prosite</a>	<a href="#">PS50071 HOMEBOX_2</a> [SRS] <a href="#">PS50071 HOMEBOX_2</a> [Expasy]
<a href="#">Interpro</a>	<a href="#">IPR006820 Caudal_act</a> [SRS] <a href="#">IPR006820 Caudal_act</a> [EBI]
<a href="#">Interpro</a>	<a href="#">IPR001356 Homeobox</a> [SRS] <a href="#">IPR001356 Homeobox</a> [EBI]
<a href="#">Interpro</a>	<a href="#">IPR012287 Homeodomain-rel</a> [SRS] <a href="#">IPR012287 Homeodomain-rel</a> [EBI]
<a href="#">Interpro</a>	<a href="#">IPR000047 HTH_lambrepressr</a> [SRS] <a href="#">IPR000047 HTH_lambrepressr</a> [EBI]
<a href="#">CluSTr</a>	<a href="#">Q5VTU7</a>
<a href="#">Pfam</a>	<a href="#">PF04731 Caudal_act</a> [SRS] <a href="#">PF04731 Caudal_act</a> [Sanger] ] <a href="#">pfam04731</a> [NCBI-CDD]
<a href="#">Pfam</a>	<a href="#">PF00046 Homeobox</a> [SRS] <a href="#">PF00046 Homeobox</a> [Sanger] ] <a href="#">pfam00046</a> [NCBI-CDD]
<a href="#">Smart Blocks</a>	<a href="#">SM00389 HOX</a> [EMBL] <a href="#">Q5VTU7</a>

## Protein Interaction databases

<a href="#">DIP</a>	<a href="#">Q5VTU7</a>
<a href="#">IntAct</a>	<a href="#">Q5VTU7</a>

## Polymorphism : SNP, mutations, diseases

<a href="#">OMIM</a>	<a href="#">600297</a> [map]
<a href="#">GENECLINICS</a>	<a href="#">600297</a>
<a href="#">SNP</a>	<a href="#">CDX2</a> [dbSNP-NCBI]
<a href="#">SNP</a>	<a href="#">NM_001265</a> [SNP-NCI]
<a href="#">SNP</a>	<a href="#">CDX2</a> [GeneSNPs - Utah] <a href="#">CDX2</a> [HGBASE - SRS] <a href="#">CDX2</a> [SNP - HAPMAP]

## General knowledge

<a href="#">Family Browser</a>	<a href="#">CDX2</a> [UCSC Family Browser]
<a href="#">SOURCE</a>	<a href="#">NM_001265</a>
<a href="#">SMD</a>	<a href="#">Hs.174249</a>
<a href="#">SAGE</a>	<a href="#">Hs.174249</a>
<a href="#">Amigo</a>	<a href="#">transcription factor activity</a>
<a href="#">Amigo</a>	<a href="#">nucleus</a>
<a href="#">Amigo</a>	<a href="#">regulation of transcription, DNA-dependent</a>
<a href="#">Amigo</a>	<a href="#">transcription from RNA polymerase II promoter</a>
<a href="#">Amigo</a>	<a href="#">development</a>
<a href="#">Amigo</a>	<a href="#">organ morphogenesis</a>
<a href="#">Amigo</a>	<a href="#">sequence-specific DNA binding</a>

[PubGene](#)

[CDX2](#)

**Other databases**

**Probes**

[Probe](#)

[Cancer Cytogenetics \(Bari\)](#)

[Probe](#)

[CDX2 Related clones \(RZPD - Berlin\)](#)

**PubMed**

[PubMed](#)

[51 Pubmed reference\(s\) in LocusLink](#)

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Drummond F, Putt W, Fox M, Edwards YH.

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Medline [9704932](#)

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Chase A, Reiter A, Burci L, Cazzaniga G, Biondi A, Pickard J, Roberts IA, Goldman JM, Cross NCP.

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Medline [9920852](#)

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Medline [10490837](#)

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## Contributor(s)

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